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A.D. 1889

Date of Application, 2nd July, 1889

Complete Specification Left, 29th Mar., 1890—Accepted, 3rd May, 1890

PROVISIONAL SPECIFICATION.

Appliance for use in Dressing Wounds.

I, ALEXANDER POEHL of Wassily Ostrow, 7 Linie, House No. 18, St. Petersburg, Russia, Professor, do hereby declare the nature of this invention to be as follows :—

According to my present invention I produce artificial antiseptic sponge as follows.

A caoutchouc bag or a bladder with elastic sides, such as sterilised animal bladder or
5 gelatine capsule, is filled with an antiseptic liquid, and is then hermetically closed by
a caoutchouc fastening, or by tying the mouth together and then dipping it into a
caoutchouc solution or in a gelatine solution with addition of chromate of potash.
The bag thus prepared is then wrapped in a bandage of soft hygroscopic bandage
fabric, which may for this purpose be rolled round the bag, the two open sides being
10 filled with two pads of hygroscopic wadding, after which the whole is sewn up in a
piece of hygroscopic bandage fabric.

The advantages of a sponge thus prepared are as follows :

1. The sponge forms the essential part of a bandage appliance such as is, for
example, sewn into the linings of soldiers coats, in order to have the necessary
15 appliances at hand in the event of wounding. 2. On the insertion of a needle, such
as is placed with the bandage appliances, the antiseptic solution will issue from the
bag and soak into the bandage fabric covering and wadding, to an extent dependent
upon the pressure exerted on the bag. 3. At every renewed discharge of the
liquid the sponge will again become antiseptic, so that this is prevented from
20 becoming septicallly unclean. 4. The slow discharge of the liquid enables a large
surface to be antiseptically washed or sterilized. 5. When the sponge has been
completely utilized as such, the outer covering of bandage fabric is removed, and
there will then remain a ready rolled bandage saturated with antiseptic liquid
for immediate use, the two saturated sterilized pads of wadding being also of use.
- 25 6. When a sublimate solution is employed, the addition of a small quantity of
tartaric acid (from 0.1 to 0.4 p.c.) will considerably increase the antiseptic property
of the sublimate solution with respect to the blood. 7. With the bandage appliances
at present in use, the sublimate bandages lose their antiseptic properties through the
fact that the sublimate when exposed to atmospheric influences, is easily converted
30 into insoluble compounds ; with the use of the above described invention these defects
are entirely obviated ; the sublimate solution does not attack the caoutchouc bag.
8. The artificial sponge is not affected by ordinary blows or pressure, as it is only
when brought into violent contact with a sharp object that the bag will be injured.
9. The sponge, is not only applicable for army medical purposes, but can also be used
35 with advantage in all cases where prompt chirurgical assistance is required, such as
in the case of railway accidents.

Dated this 2nd day of July 1889.

ABEL & IMRAY,
Agents for the Applicant.

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COMPLETE SPECIFICATION.

Appliance for use in Dressing Wounds.

I, ALEXANDER POEHL of Wassily Ostrow, 7 Linie, House No. 18, St. Petersburg,
Russia, Professor do hereby declare the nature of this invention and in what manner
the same is to be performed to be particularly described and ascertained in and by
45 the following statement :—

According to my present invention I produce artificial antiseptic sponge as follows :—

A caoutchouc bag or a bladder with elastic sides, such as a sterilized animal
[Price 4d.]

Poehl's Appliance for use in Dressing Wounds.

bladder or gelatine capsule, is filled with an antiseptic liquid, and is then hermetically closed by a caoutchouc fastening, or by tying the mouth together and then dipping it in a caoutchouc solution or in a gelatine solution with addition of chromate of potash. The bag thus prepared is then wrapped in a bandage of soft hygroscopic bandage fabric, which may for this purpose be rolled round the bag, the two open sides being filled with two pads of hygroscopic wadding, after which the whole is sewn up in a piece of hygroscopic bandage fabric. 5

The advantages of a sponge thus prepared are as follows :

1. The sponge forms the essential part of a bandage appliance such as is, for example, sewn into the linings of soldiers coats, in order to have the necessary appliances at hand in the event of wounding. 2. On the insertion of a needle, such as is placed with the bandage appliances, the antiseptic solution will issue from the bag and soak into the bandage fabric covering and wadding, to an extent dependent upon the pressure exerted on the bag. 3. At every renewed discharge of the liquid the sponge will again become antiseptic, so that this is prevented from becoming septically unclean. 4. The slow discharge of the liquid enables a large surface to be antiseptically washed or sterilized. 5. When the sponge has been completely utilized as such the outer covering of bandage fabric is removed, and there will then remain a ready rolled Marly bandage saturated with antiseptic liquid for immediate use, the two saturated sterilized pads of wadding being also of use. 10 15 20

6. When a sublimate solution is employed, the addition of a small quantity of tartaric acid (from 0.1 to 0.4 p.c.) will considerably increase the antiseptic property of the sublimate solution with respect to the blood. 7. With the bandage appliances at present in use, the sublimate bandages lose their antiseptic properties through the fact that the sublimate, when exposed to atmospheric influences, is easily converted into insoluble compounds ; with the use of the above described invention these defects are entirely obviated ; the sublimate solution does not attack the caoutchouc bag. 8. The artificial sponge is not affected by ordinary blows or pressure, as it is only when brought into violent contact with a sharp object that the bag will be injured. 9. The sponge, is not only applicable for army medical purposes, but can also be used with advantage in all cases where prompt chirurgical assistance is required, such as in the case of railway accidents. 25 30

Having now particularly described and ascertained the nature of this invention and in what manner the same is to be performed I declare that what I claim is :— 35

An artificial antiseptic sponge composed of an internal elastic receptacle containing fluid enclosed in a covering by a porous absorbent fabric substantially as described.

Dated this 29th day of March 1890.

ABEL & IMRAY,
Agents for the Applicant. 40



